

Towards a New Sociology of the Future*

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Abstract

In this paper I explore some of the very early social science approaches to the future and revisit a sociological perspective that emerged in the United States during the 1960. It was a perspective that sought to establish the future as a legitimate subject matter for sociology and called itself accordingly, 'The Sociology of the Future'. I explore the explicit and implicit assumptions that underpin this and the earlier approach to the study of the social in order to investigate to what extent these still hold good for the contemporary condition. Where the identified approaches and assumptions fall short I note some of the changes that might be necessary for the sociology of the future to become a viable social science enterprise, appropriate to its contemporary subject matter.

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Introduction

Concern with the future is to be found at the very beginning of the social science enterprise and of sociology as an independent discipline. It is intimately tied to industrialisation and the periods of intense political turmoil between the middle of the eighteenth and nineteenth century. French social thinkers in particular were noted for their efforts to aid progress and to participate in the creation of a new order. From a different thought tradition and political context Karl Marx too sought not merely to interpret but to change the world. These first social scientists were concerned to engage with, identify and shape their history in the making. They were interested not just to understand the future but to help usher it in and to play their part in creating the good life for the masses.

With the subsequent focus on ‘function’, ‘structure’, ‘meaning’ and ‘action’ this normative concern with the future went out of social science favour until the 1960s when a renewed interest in the future began to flourish. Once more, the focus on the future drew in key social thinkers in both the US and Europe, who rose to the challenge that such engagement with the future presented. Sociology after Durkheim, Weber, Parsons and Symbolic Interactionism, meant that any naïve ushering in of progress or commonsense focus on the future was no longer possible. Social science involvement in this ‘immaterial’, metaphysical realm had to be thoroughly theorised and methodologically justified, any normative stance ethically grounded.

Accordingly, these sociologists of the future considered not just their difficult subject matter but reflected on the impact their proposed approach would have on the role of the sociologist. Despite this intensive and extensive concern with the future, during the 1960s and the decade beyond, however, the wave of interest has ebbed and today it is safe to say that the future is no longer at the centre of sociological thinking. As futurology, a very specific and delimited investigative practice with its own distinct identity and dedicated journals, it has been separated off from the mainstream of social science practice.

Today, at the beginning of the 21st century, as scientific, medical, political and economic practices produce ever more extensive futures, the sciences charged to explain that social world have abdicated their responsibility for the study of this social domain to futurologists whose primary interest is to develop increasingly sophisticated tools to forecast and model the future. This neglect of the social future as subject matter has created a black hole of knowledge and concern about a core problem of the contemporary social condition. I am referring to the crucial disjuncture between the technological capacity to produce futures that extend over thousands of years, the lack of knowledge about potential outcomes and impacts of these mostly technological creations and the socio-political inability and/or unwillingness to take responsibility for the futures of our making. In this paper I explore past sociological approaches to the future and consider their suitability as conceptual and methodological tools to address the contemporary dilemma. Where I find the tradition lacking I ponder what changes might be necessary for a contemporary sociology of the future to become appropriate to its subject matter.

The Future in the Beginning: The ‘Prophets of Paris and Marx

Efforts to control the future, to influence development and to shape the direction of progress are inescapably tied to industrialisation and social organisation in the age of

rationality and Enlightenment. With the rise of scientific knowledge and the socio-economic capacity to apply a rational calculus to ever wider spheres of social life, the future ceased to be the exclusive domain of God and increasingly became pulled into the orbit of social action and concern¹. The change in knowledge brought with it a change in practice that facilitated a new dynamics of change with people increasingly able to transcend their socio-economic present and impose their will on both the personal and collective future. The future was therefore no longer a mere continuation of the past but became increasingly a consequence of actions in the present. This was nowhere more apparent than in France's revolutionary period from the middle of the eighteenth to the middle of the nineteenth century. Accordingly it was the key social thinkers of France that spearheaded a form of social science that would help to bring about the desired new world.

In his book 'The Prophets of Paris' historian Frank E. Manuel (1962) describes Turgot, Condorcet, Saint-Simon Fourier and Comte as thinkers and social commentators with a social mission. All, he suggests, were concerned not just to 'unveil' the future but to steer it in a particular direction.

They were intoxicated with the future: they looked into what was about to be and they found it good. The past was a mere prologue and the present a spiritual and moral, even a physical, burden which at times was well nigh unendurable. They would destroy the present as fast as possible in order to usher in the longed-for future, to hasten the end. (Manuel 1962: 6)

With France in socio-political turmoil, these 'prophets' sought to contribute to the cumulative effect of innovation, to aid progress and to help facilitate a climate of openness for novelty and change.

Given the one hundred year span of their intellectual and political activity there clearly were substantial differences between their respective approaches to the future. These, however, paled into insignificance when compared to the wider motivations that guided their work. In addition to their disdain for sameness and social stagnation they shared some notable concerns, worthy of our attention. Each one placed politics low on their list of significant agents for change and focused instead on the role of science and technology, morality, aesthetics and spirituality. They abhorred strife and sought peaceful means to the good life. They placed their faith not in revolution but in the perfectibility of human beings, the power of reason, tolerance and love and the vision of a brotherhood of man. They were convinced that true knowledge was achievable only through (empirical) science for which they saw an increasing need to be a collective rather than an individualised enterprise. And, most importantly in the context of this essay, they saw themselves as moral agents for change, labouring for posterity and in particular for a better future of the disadvantaged groups of society such as the labouring classes and women. Thus Manuel (1962: 66) quotes Condorcet who describes his own mission as 'the task of hastening progress to be one of my sweetest occupations'. Not one of them saw a contradiction between their commitment to science as the path to truth and their normative engagement in the active production of futures they prophesised.

Despite the fact that Karl Marx did not rate the work of these French thinkers, he took a similar stance regarding his commitment to science and the prophetic normative approach to the future. As he insisted his Theses on Feuerbach, 'philosophers have only interpreted the world, in various ways; the point is to change it (McLellan ed.

1977: 158). Like his French predecessors and counterparts, Marx provided visions of how the world could (and should) be different from its present alienated form and identified paths that would lead to the utopian ideal he constructed. Whether or not it was explicitly argued in those terms, in Marx's work, like that of the 'Prophets of Paris', social theory was indissolubly tied to practice, interpretation to normative conduct, science to politics, and prophesy to product.

This explicitly activist, future oriented approach to social analysis came to an end with the normative science of Marx and Engels and was replaced by the more objectivist science of Durkheim and Parsons on the one hand and the interpretive emphasis in the work of Weber and the Symbolic Interactionists on the other. While the objectivist mode of social science investigation prohibited the normative stance and thus militated against social science promotion of specific futures, the interpretative perspective prioritised the past and present as sources of meaning. Alternatively, investigations were conducted in the synchronic realm of meaning and social rulesⁱⁱ. It was thus not until the 1960s that the next explicit and intense social science engagement with the future was to be encountered. In the US this turned out to be a serious commitment to post-Parsonian sociology that extended over a period of twenty years and more. In the UK scientists from across the full range of social sciences received funding from the Leverhulme Trust and the Social Science Research Council to think about the future and to establish the social sciences' contribution to that central aspect of social existenceⁱⁱⁱ. While much of the UK's social scientists work on the future was primarily concerned with the production of better forecasts and methods for foresight, a number of their US counterparts wanted to achieve more than that and sought to make the engagement with the future central to the sociological enterprise, that is, to adjust its focus and method to a social world for which the orientation to the future was at the core of social activity. It is this 'Sociology of the Future' that we want to investigate in more detail before exploring the suitability of its principle assumptions for the analysis of contemporary social futures.

The Sociology of the Future of the 1960s

In 1971 Wendell Bell and James Mau published an edited collection of articles with the bold title 'The Sociology of the Future'. In their contributions the editors presented the case for such a perspective, which they differentiated from the forecasting efforts of what is generally known as Futurology. Their claim that systematic engagement with the future was a massively expanding concern in the social sciences generally and in sociology in particular is substantiated in the book by Bettina Huber's annotated bibliography. For a number of reasons I want to take this book as primary source for my investigation of this particular social science perspective: It was produced at the height of the social sciences' focus on the future, is steeped in the literature of that time, and represents the most reflective and conceptually coherent approach to the subject to date. It took what was then, and still is today, an anti-traditional stance to the subject and meticulously followed through the implications of this perspective for the discipline of sociology. Most importantly, it is both similar to and different from the approach I want to propose in this paper. This makes it a particularly interesting and challenging work to engage with and discuss.

‘The Sociology of the Future’ was conceived in a distinct socio-historical context. By then the Second World War was sufficiently far in the past for sociological commentaries on that war, such as those by members of the Frankfurt School, to have become absorbed into the canon. The ongoing socially divisive Vietnam War confronted social scientists with their own positions vis-à-vis America’s foreign policies. The Civil Rights movement was at its height. Existentialism and the humanistic writings of Marx were inspiring the student population. With regard to scientific and technological developments, the first man had been sent to the moon. Nuclear reactors were mushrooming, promising plentiful cheap electricity. Computer power was on the rise, vastly increasing the capacity to calculate and predict. This was a world of rapid transformation where change was expected as the norm and understood as the outcome of deliberate action. The mood was generally forward looking, oriented toward the future with bitter-sweet optimism. The 1960s were thus fertile ground not only for futurism but also for sociologists to reflect on the nature of their subject matter, their discipline and their role in society. In my consideration of that work I will first detail some of the factual matters as well as some of the explicit concerns and stated assumptions before I explore some of the implicit assumptions and thought traditions that underpin the perspective. The combined key features are then investigated with regard to their suitability to a) explain contemporary approaches to the future and b) aid the production of more just and equitable futures.

In her annotated bibliography Bettina Huber details 245 books and articles written during the 1960s and some ten journals, newly published during this period, all of which were oriented explicitly toward the social future. These publications ranged from analysis to advocacy, from actual forecasts to methodological issues and the nature of the predictive process. In the light of this flurry of activity Bell and Mau considered the part sociology *was* playing in the process and the role it *could* play, as well as some of the substantive issues that required particular attention. They produced the ‘The Sociology of the Future’ against a background of Parsonian social theory on the one hand and increasing governmental demand for sociology to provide useful (quantitative) information on the other. Alongside many of their colleagues they thought of these two influences as the dual peril of irrelevance and operating as handmaidens to established interests^{iv}. The sociology of the future was able, they thought, to steer sociologists clear of both dangers. Moreover, it had the potential to facilitate disciplinary renewal at the level of meaning, theory and practice and demanded that sociologists reflected on their role and place in society. In the concluding essay Bell summarises the approach in the following way:

[The Sociology of the Future] represents both a scheme for organizing and analysing the social realities that confront us, and a way of orienting and directing our efforts as sociologists. The study of the possibilities for the future may offer a way out of the present deadly confrontations, a way that allows a happy marriage between the old hallowed values of science and the older, perhaps more hallowed, values of social responsibility. For the scientific study of alternative futures by its very nature combines the search for knowledge with an action orientation. (Bell, 1971: 328)

Regarding the social sciences ‘hallowed values of social responsibility’, Bell is referring to ‘Prophets of Paris’ (Manuel 1962), the founders of the discipline who were so eager to usher in a better future and help to shape its direction with their work. It is this action orientation, which prevailed during the early development of the discipline, that Bell and Mau want us to re-connect with in order that we might be

able to transcend mere description and analysis and supplement this important aspect of sociological work with a more formative stance that takes account of social values and morals. They propose therefore that we remember ‘some of those traditions that seem to have been forgotten by many in the mainstream of American sociology today’ (Bell and Mau 1971: 4), that we understand sociology to include the effort to create a better and more just society, which, in turn, requires visions and images of the future.

Bell and Mau point out that even where sociologists do not take on board the action-based approach, their process of investigation, their analyses and their reports on findings change the world they are studying. Sociological knowledge, they insist, is inescapably constitutive whether or not this fact is acknowledged. They thus urge us to become aware of our inevitable impact on society, to become cognisant of the constitutive power of our knowledge and to take seriously the responsibilities attached to that power. Moreover, given this inadvertent power to change, they suggest that sociology would be well advised to look beyond the problem of order and begin to see the task of sociology more as one of purpose, planning and steering. This means bringing together in our analyses structure with action, observation with values, and these in turn with the plans and decisions that form and give shape to the social future. This expanded perspective inevitably transforms sociology into a very different scientific enterprise from the dominant Parsonian one of their time and it fundamentally changes the role of the sociologist.

The new sociologist will see himself^v as part of the social reality he studies and will take account of the effects of his actions. He will be a responsible agent of history...

The new sociology will not simply accept existing systems and institutions as they are, but will be oriented toward devising alternatives. It will encompass conflict and dialectics. It will be dynamic and change-oriented. It will deal with the emergent as well as the extant. It will be transcendental^{vi}.

It will be concerned with values and their achievement and will be sensitive to the consequences of both stability and change with respect to manifest goals and unanticipated consequences...

The new sociology will be humanistically, as well as scientifically, oriented.
(Bell 1971: 333-4)

With this novel approach to the study of the social Bell and Mau attempt to ease sociologists out of their social science beliefs in objectivity, value neutrality and detachment, to assist in the recognition of this positivist stance as myth, and to identify new ways of being systematic in method, diligent in the search for truth and meticulous in attending to the moral duty that accompanies the active participation in the production of the collective futures. Accordingly, Bell (1971: 334) suggests that this new sociology will be ‘explicitly moral, not just in its commitment to procedure but also in its commitment to bettering the human condition’.

From the perspective of the sociology of the future, sociologists are ‘future makers’, inescapably implicated in both the decision-making processes about goals and the various quests to bring about desired ends. Importantly, this makes sociologists not just responsible for their actions in the present but for the outcomes of their actions, that is, the eventual effects of their change-directed work (Bell and Mau 1971: 37). In the light of this, social scientists can no longer be mere tools for their clients’ desires but have to become judges of the ends to which their knowledge will be put. As

agents of the future, sociologists need to ground their knowledge in the most widely shared and most deeply held social values. For Bell and Mau (1971: 38) in addition to ‘human dignity and individual self-fulfilment’ these are, ‘human life, health, security, affection, and level of living. As such, this list of values is similar to the cluster of commonly held aspirations for the future I have identified in recent work (Adam 2004b: 1), which include safety, salubrity, security, solvency, success, and sustainability.

The methodological aim of the US sociologists of the future of the 1960s was to bring to the fore future-producing aspects of both contemporary society and sociology. This entailed a shift from synchronic analysis of the present and attendant emphasis on prediction based on knowledge of the past towards diachronic, dynamic study and analysis of the prospective and projective aspects of social life with the associated emphasis on control. This in turn demanded, as I have shown above, consideration of the implications of our sociological roles as agents for change and reconsideration of earlier questions about our work regarding commitment and value relevance. In addition, the sociology of the future was underpinned by two primary, explicitly acknowledged assumptions: first, that the future is real only in the present and secondly, that human history is marked by increasing mastery over nature. I will elaborate these in turn as they are important for the discussion that follows.

The first contention is that the locus of reality is the present. This understanding reaches back to the writings of St Augustine who came to the conclusion, in the 4th century AD, that the past and future had no existence outside the human mind where they functioned as memory and expectation respectively. This particular understanding of the reality status of past, present and future had been reactivated by George Herbert Mead (1932/1980) in conceptual work he conducted shortly before his death where he gives privileged status to the present and understands the past and future as ideational spheres, as aspects of mind related to memory and anticipation^{vii}. Bell and Mau (1971: 6-10) endorse Mead’s present orientation, pointing out that the past has been present, the future will be present, and possibilities are conceived and actualised in the present. In addition, however, they point to an important difference between the past and future, which is recognised in Brumbaugh’s (1966: 649 in Bell and Mau 1971: 9) statement that, ‘*there are no past possibilities and there are no future facts*’. This distinction, they argue, needs to be taken account of in social studies of the future.

This present-orientation leads Bell and Mau to propose specific tactics for studying the ‘not-yet’, which is not ordinarily amenable to experience. To overcome the metaphysical dilemma they suggest to study ‘images of the future’, which are amenable to sociological study in both their individual and collective forms. ‘Images of the future’ become real in the present insofar as they orient human action. As such, they are facts that can be tested against subsequent events. In a similar way, they argue, present possibilities for the future are real. Thus the authors approvingly detail Waskow’s (1969) proposal to engage in ‘possidiction’, by which he means the search for real possibilities, which is dependent on the sociologists’ skill of identifying desirable seeds of change that might flourish given the right socio-economic and political action (Bell and Mau 1971: 36-7). The task of the sociologist, the editors consequently propose, is to examine the ‘actually possible’ rather than replicas from the past, which are the subject matter of scientific predictions and projections of

trends. This approach, the authors argue, has methodological consequences. First, it means importing the future into the present where different possibilities are actualised (thus real) on the basis of images of the future. Secondly, it means that determinism is inappropriate for the sociology of the future since the future remains open until it has become the present. Thirdly, it means that the future is relative to the frame of reference employed. From this perspective, therefore, the future is *a possible, present future, a future that is pictured, planned, projected, pursued, and performed in the present*.

Not quite so much thought, explanation and argument is expended on their second presupposition, which takes as a given fact that human history is marked by a steadily increasing capacity to control nature and shape our social environment (Bell and Mau 1971: 10-12). While it is acknowledged that earlier societies were also guided by visions of the future, it is thought that fatalism rather than choice tended to be the lot of predecessor societies. Where the options of our forebears were largely restricted to the means for achieving pre-set ends, the authors suggest, members of today's industrialised societies have choices over both the ends and the means of their actions. Only when both the goals and the ways to achieve them become subject to individual and collective volition is there an opportunity to establish new values and norms. This capacity to fashion the world according to our will and desire brings with it the 'burden of responsibility' (Bell and Mau 1971: 12), which applies to citizens and social scientists alike. For sociologists, however, it means additionally that their explanations have to encompass the moral issues involved.

In concluding this brief resume of the Sociology of the Future of the 1960s we can say that it is a perspective rather than a grand theory. It is a way of understanding both the subject matter and the discipline that allows it to be applied to any topic and sub-field of the social sciences. It is explicitly geared towards a social world of accelerating change that is subject to human intervention; and it seeks to offer useful information and relevant alternatives for a world under pressure from ceaseless innovation. It demands of the social investigator engagement, commitment and responsibility. It has been developed in response to the dominant functionalist social science of its time and on many fronts takes opposing views regarding matters of ontology, epistemology and methodology. It reinstates critique, control, creativity, imagination, intervention, justice, morality, personal responsibility, spontaneity and values to the sociological tradition without allowing scientific rigour to be sacrificed. It thus seeks to provide its followers with the best that the sociological tradition has to offer.

This best-of-all-sociology approach, however, contains some irreconcilable elements and assumptions that need to be considered before we can examine the Sociology of the Future for its relevance to the industrialised world at the beginning of the 21st century. The first element to be considered relates to the unwavering faith in science as appropriate means to investigate approaches to the future, the second to the commitment to sociology as a moral enterprise. With regard to science I am particularly interested to investigate three primary assumptions that underpin the scientific enterprise: causality, materialism and the present-orientation. All three pose problems for the study of the future in general. Each one sits uncomfortably with the particular Sociology of the Future approach outlined above. With respect to the moral issues involved I am interested to follow up on the ethical assumptions and on the way responsibility is conceptualised. In what follows I set out to demonstrate that to

take sociology's 'future making' seriously requires changes at the very heart of the discipline, changes that cut far deeper than the Sociologists of the Future had bargained for when they set out the new perspective and contemplated its implications.

The Commitment to Science

As a science, sociology studies a reality that is empirically accessible. It deals with sense data, with things, processes and events that can be quantified and verified, with a world connected by causal relations. In the history of the social sciences in general and sociology in particular much thought has gone into defining the nature of the social in a way that is amenable to empirical study and to the treatment of social 'things' and processes as fact. This had been achieved most successfully by functionalist and structuralist methods of study, often grouped together under the term positivism, which meant study of the human social in ways that came as close as possible to the methods of the natural sciences. Much of the thinking that arose from the *Geisteswissenschaften* in Germany and the work of the Symbolic Interactionists in America was a debate with this positivist approach to the study of the human social. Sense-making, meaning, symbolic interaction, values and purposive action were all recognised as integral to the human social and thus, it was argued, had to be encompassed in the study of that world.

Today, however, the human social includes not just social relations and institutions, social structures and socially constituted meaning, it also encompasses a socially and technologically produced world that is time-space distantiated, to use Anthony Giddens' term^{viii}. This social sphere spans the globe and stretches into open futures. Its influence reaches beyond the human world to the natural environment. Much of this world is not material in the conventional sense. It is constituted by the deeds already under way, latent and immanent, which means not yet materialised as symptoms. It is this socio-technically created future, which is of interest to a Sociology of the Future that is appropriate to the beginning of the 21st century. It is the future of processes – chemical, nuclear, biological, genetic, to name just a few – set in motion by socio-political and scientific action. It is the future under way, currently in a phase of development in which it is not 'matter', not sense data in the traditional scientific sense and thus not amenable to empirical study. The actions and processes of this future in the making are ongoing whilst their eventual time-space distantiated outcomes are potential. Once these latent processes materialise as symptoms, it is very unlikely that their causal connections can be established with certainty. Radiation, acid rain, global warming or the effects of hormone-disrupting chemicals, for example, are no longer traceable to their origin(s).

To engage with futures already set in train therefore requires a very different understanding of materiality from the one that has been encompassed thus far by materialist science on the one hand and both the positivist and interpretative traditions of sociology on the other. Such an alternative conception of the material needs to accord reality status to the im/material (that is, the material and the immanent 'immaterial' as indivisible unity), the virtual and the latent, to that which is not accessible as sense data, to the invisible future potential that is 'existing' and developing out of sight and reach. It needs to conceive the 'real' in terms not just of the products of actions, that is, their outcomes in the present, but also the processes in

their immanence. This is a socio-philosophical task that transcends what the Sociologists of the Future had in mind when they formulated their sociological perspective during the 1960s.

The Sociologists of the Future had recognised that the future was not empirically accessible and thus had resolved to study not the future but ‘images of the future’, that is, the future transported into the present. Focus on how the future is envisaged, what future ideals and utopias guide social actions in the present, enabled them to still meet ‘the canons of science’ (Bell and Mau 1971: 40). With this approach the Sociologists of the Future managed to sidestep the problem of the immateriality of the future. Today, however, this sideways move is no longer sufficient for the task at hand. The social psychology of people’s motives, intentions and actions guided by visions of the future gives us no purchase on the social world of our making that affects not just our future but that of contemporaries across the globe as well as that of successor generations of humans and fellow species for thousands of years to come. Denying reality status to the future already on the way makes it impossible to encompass the potential effects in our considerations, impossible to accompany our actions to their time-space distantiated destinations and to institutionalise responsibility. The canons of science, as practiced in the social sciences, constitute part of the barriers to modes of engagement with the future that are more appropriate to the contemporary condition. Thus, for example, when scientists are engaged to establish the safety of technologies that reach thousands of years into the future and they continue to use methods that project the future on the basis of a known past, social scientists and philosophers have the duty to engage with this problematic state of affairs, point to the inappropriateness of the method and find new alternative ways to relate to the ‘immaterial real’ of our making, to the ‘deeds already underway’.

Wilbert E Moore, a guiding light and mentor of the Sociology of the Future perspective insists that the future, not the past is the cause of the present and suggests that it is sociologists’ blindness to human intentionality, which prevents them to engage with the future.

The future *is* the cause of the present in substantial degree, and it is only the failure of sociologists to come to terms with human purpose that has hidden this verity from their view. (Moore 1966: 770)

I would like to propose that the matter is far more complicated than that, that the difficulty reaches far beyond human intentionality deep into the heart of taken-for-granted assumptions upon which the sociological discipline is founded. In this paper I wish to address just three of these guiding assumptions: materiality, which we have discussed above, causality and the present-orientation. All three have a bearing on the way sociology relates to the future. Importantly, the modification of all three emerges as a pre-condition to a sociology of the future that is adequate to contemporary futures planned and on the way.

Science deals with causal chains. It asks ‘how?’ questions. These give answers to *how* the present and the future arise from preceding events, that is, the past. Explanation of objects in motion requires thinking in terms of cause and effect. To explain the present, and by extension the future, on the basis of the past has the advantage that it brings certainty to what might otherwise be thought of as uncertain relations. From a known past we can project the future as trend and probability. As scientists

sociologists cannot evade past-based causality, the push from the past, since this is the undisputed scientific way of explaining temporal relations^{ix}.

There is, however, another, much older way of explaining causal relations and this is grounded in ‘why?’ questions and is predominantly focused on the pull from the future. It is variably known as final causes or teleological explanation. This way of understanding temporal relations is directed to human purposes, intentions, goals and value orientations and most generally the meaning of action that Wilbert E. Morre was referring to above. Here the future is regarded to be the cause of the present and past. The temporal flow moves in the opposite direction from scientific causality and the certainty gained through past-based causality evaporates with the causality that emanates from the future. Choice, freedom, morality and the fact that humans can act in the light of new knowledge and desires makes the future-based cause irreducibly uncertain, indeterminate even. In the world of future-based causality the scientific (and political) quest for control becomes inappropriate. Other quests come to the fore. Questions of ethics and aesthetics are given room to flourish.

The history of science is marked by a slow eradication of final causes as they were used in Greek Antiquity, in religious thought and everyday conduct through the ages. Interestingly, biology, which needed to retain some sense of goal orientation to explain the directionality from acorn to oak and from chick to hen, has resolved the problem of teleology through explanation by function. The move toward functionalist explanation has been eagerly absorbed into the canon of both sociology and anthropology. Function can refer to sequences and the a-temporal role of the part within the whole. In that way certainty and control are affirmed and any reference to a designer god, human values and ideals, and questions about good and evil have been moved outside the scientific frame of reference. When Moore suggests that sociologists need to take account of purpose and intentionality, that is, the future as cause for action, he leaves the functionalist territory of sociology.

When sociologists of the future intend to use the two knowledge traditions to complement each other, they need to be conscious of the differences and utilise the associated conceptual tools accordingly. This conceptual self-consciousness is important because the differences need to be explained at the point where their work intersects with that of policy makers. If sociologists do not merely want to describe the world but help to change it, the explicitly stated goal not just of Karl Marx but the Sociologists of the Future of the 1960s then these differences need to be surfaced as a precondition to identifying and showing potential openings for social change. Only with teleological causality is it possible for sociologists to extend themselves into the future, not just for the purpose of taking account of values, goals and aspirations, but more importantly, to place themselves in the future and to view the present from that perspective. Only with this understanding of temporal relations is it possible to take responsibility for the outcomes of actions, to take seriously the idea expressed by Hans Jonas (1984/1979: 129) in his seminal *The Ethics of Responsibility* that ‘duty springs from the deed already under way’.

The third assumption, which permeates scientific approaches to the future relates to the present-orientation of both focus and method of study. This in turn is closely linked to the materialism discussed above. Its historical root however is not in science but the writings of St Augustine who, in his conversations with God, came to the

realisation that only the present was real, past and future being mere aspects of the mind. St. Augustine's understanding of past, present, and future as present past, present, and present future, coexisting in the mind, has lost nothing of its potency in the intervening 1600 years. For George Herbert Mead's (1932/1980) innovative work on the reality status of past, present and future it meant that the real future, just like the real past, is unobtainable, that the mind is our exclusive passport to the future and, most importantly for our argument here, that any reality, which transcends the present, must exhibit itself in the present. Although intended as a radical departure from the spatially and quantitatively oriented sociology of his day, Mead's present-orientation dovetailed neatly with the scientific approach that could access only what was empirically available in the present. When Mead's perspective is enrolled for the purpose of studying the future through present images, goals, ideals and values, its radical potential is neutralised and the approach absorbed into the conventions of science. The methodological challenge set by Mead's *Philosophy of the Present*, of working through the difficulty of accessing the ideational, that is, the im/material real in the present, is left un-addressed; the potential for transcending the barriers to new understanding has been lost. As conventional science, this perspective becomes re-grounded in the 'metaphysics of the present', that is, in the assumption that to be is to be present.

Future studies conducted within this frame of reference seek to discover facts and potentialities in an empirically accessible present, uncontaminated by the temporal vastness that transcends the present and is encompassed therein. The present-orientation provides investigators with a semblance of certainty and control. 'Real' certainty and control, however, are ever harder to realise in a world where the unintended consequences far outweigh intended effects and where risks and hazards emerge with increasing regularity in contexts where none were forecast and expected^x. In the Sociology of the Future 'choice' and 'control' were still unproblematically hitched to each other: the future is increasingly the result of choices and is (therefore) becoming increasingly subject to human control. Today we are only too painfully aware that choice and control are in fact inversely related, that increase in choice seems to be accompanied by a decrease in control. Ulrich Beck's 'Risk Society' is one primary example of analyses of this inverse relation^{xi}. Concluding the discussion on the present-orientation of science we can say, when 'certainties' emerge as unforeseen problems, past- and present-oriented science seems singularly ill-equipped to deal with them other than applying more science and more technology. Thus, the assumptions we bring to the study of the future matter. As long as they are left implicit they can act as barriers to progress, unhindered and unchallenged. They need to be surfaced therefore as a precondition to alternative praxis.

Alwyn Toffler (1969) in his introduction to a book edited by Baier and Rescher on '*Values and the Future*' introduces the idea of a new social science profession: the 'value impact forecaster'. He suggests that such scientists would be exclusively concerned with the study of the material impact of both technological and economic social values. He envisages this new breed of social scientists to be employed by corporations and institutions, government departments and non-governmental organisations to help with the assessment of the potential impact of future-producing plans and decisions. His proposal arises from deep socio-political concerns.

Only if potential value-impacts are laid bare and open to public discussion early in the game can we achieve anything like democratic control over the

technological future...

The presence of such forecasters in the centres of technological research and development would also make scientists and technicians more aware of the social repercussions of their work. (Toffler 1969: 29)

Both the demand and the reasons for the demand are central to present concerns. Difficulties arise when Toffler envisages this task to be achieved through the accumulation of vast quantities of data and with the conventional tools of science, supplemented by a dose of imagination, speculation and expert-based techniques such as the Delphi method. These scientific tools may be adequate, to a substantial degree at least, to engage with the future that is yet to be envisaged, planned and decided upon. They are not, however, as I have shown above, the appropriate conceptual tools to engage with the future already under way or to encompass the potential implications of futures arising from innovative technologies.

Past-based causality, conventional materialism and the present-orientation, key conceptual tools of traditional science, are inadequate and inappropriate assumptions to bring to bear on studies of value-impacts on technological futures in progress. Science, from the Latin *scientia*, means systematic study. What constitutes systematic study, however, is rooted in convention and has changed dramatically over time. There is nothing in the concept of *scientia* that would prohibit its extension to teleological causes and a redefinition of materiality that encompasses immanence, in other words the incorporation of the future into the scientific frame of reference. Clearly this would require changes to the very heart of the scientific method as practiced today, in order for both the method and implicit assumptions to become appropriate to the contemporary socio-technical subject matter. This change alone, however, would not suffice for rendering the Sociology of the Future a viable social science enterprise. It would require in addition that we pay attention to the moral arguments entailed. In their efforts to rethink the role of the social scientist, the sociologists of the future sought to combine the methods of science with humanist ethics. It is the moral part of this equation that we briefly need to address before we can draw together the argument for some concluding reflections.

The Sociology of the Future as Moral Enterprise

As moral enterprise the Sociology of the Future has several strands to its ethics and includes the following lines of argument: following Kant and the insights of quantum physics at the beginning of the 20th century, it is recognised that the questions, that are brought to any study, frame and delimit the findings of investigations. Moreover, the very act of investigation impacts on the subject matter, which means that sociologists of the future play an unavoidably formative part in the future they are interrogating. This places researchers and theorists in a position of inescapable responsibility vis-à-vis their subject matter and their discipline.

In the second strand we can identify a more normative position when Bell and Mau agree with the Marxian stance that it is the duty of sociologists to go beyond mere interpretation and actively help to create a better world. This is where the sociologists of the future want us to re-connect to the earlier tradition of Comte, Condorcet and Saint-Simon who not just unveiled and analysed the potential future but sought to steer it in a desirable direction. Potential accusations of bias are dismissed on the grounds that the commonly held values of health, security, prosperity, and liberty, for

example, provide the framework within which the better future could be identified. In the context of 1960s sociology, this activism is recognised as daring. Yet, as Moore (1966: 772) noted, ‘a little activism of this ambitious kind will do us no harm at all.’

A third strand of the ethics promulgated by the sociologists of the future is represented by the position of Alwyn Toffler, who emphasised the importance for sociologists to bring to the fore and explicate the moral choices that are being made on a daily basis when futures are being produced.

Moral neutrality may or may not be a defensible position for a researcher to adopt; moral ignorance is inexcusable. Value-impact forecasting could help make clear the nature of the moral choice being made each time a line of research is opened, a project funded, or an innovation released from the laboratory. (Toffler 1969: 29)

Value-impact forecasting was to extend into the future so that the consideration of moral choices could become integrated as routine into the daily decisions and activities of business, politics, education and health professionals, for example. Toffler’s formulation of value-impact forecasting can be seen as a precursor idea to the Precautionary Principle, which is developed to incorporate values and moral questions in decision-making processes in contexts uncertainty.

In their efforts to incorporate a moral humanism, the sociologists of the future drew on a moral tradition that extends back to Greek Antiquity. Much of the assumptions that underpin that moral code have become naturalised and are embedded in the deep structure of western moral assumptions. The key elements to this moral code are anthropocentrism and boundedness in time and space. In his seminal book, *The Imperative of Responsibility*, the philosopher Hans Jonas (1984/1979) identifies these premises as follows: Moral action is conceived as reciprocal and focused exclusively on the intra-human realm. It is consequently concentrated on actions of immediate reach and close proximity in time and space. Moreover, the nature of things and humans is thought to be fixed. Thus, in the ethics of the here-and-now of shared presents, the good is assumed to be known and what is right undisputed. In antiquity the long-term future belonged to the non-human sphere of fate and chance, providence and destiny. It was out of human reach and thus beyond ethical concern. The Greek city as domain of human influence had no more than a superficial impact on nature’s balance and awesome force. That is to say, the strictly bounded transformative power of the citizens of ancient Greece left nature largely unchanged in its formative and creative power. Today many of these preconditions to the traditional western moral code no longer apply. What had been assumed fixed has become subject to change. Consequently good and evil have become objects of debate and definition. Importantly, the contemporary operational realm of human action extends into a very long-term, open future. This awareness was only just beginning to emerge when the Sociology of the Future was developing in the United States during the 1960s. Today, with the massive expansion of socio-technical reach in time and space and the associated recognition of long-term environmental impacts, it is no longer appropriate to think and act with reference to neighbours and contemporaries, kin and the next generation of humans.

The changed socio-technical conditions of contemporary industrial societies thus present new ethical challenges that are rooted in the gap between the power to act and the capacity to know. It is Jonas’ central argument that the *imperative of responsibility*

has no precedent in the history of ethics and thus requires ethical innovation on many fronts. Since our contemporary technological capacity impacts on nature in a new way – changing the balance of its forces, its regenerative power and its evolution, to name just a few examples – the ethical sphere has to be expanded so as to match the realm of human influence in both time and space. It has to transcend the human realm and encompass nature and the universe. It has to reach beyond the present to the techno-future of our making. It has to embrace not just next of kin but generations of potential successors (both human and non-human) as far into future as our actions are extended by way of influence and impact. Moreover, responsibility for shaping the future in contexts of radical uncertainty presents challenges at the level of theory and practice that were not yet on the sociological agenda of the 1960s. This is where the conventional nature of the ethics promulgated by the sociologists of the future, falls short of today's target and is no longer adequate to the contemporary condition.

The contemporary imperative of responsibility requires that *responsibility be adequate to the sphere of influence*. This very reasonable demand, however, moves ethics from the tangible sphere of spatially delimited rights and duties to compatriots and contemporaries towards the open and unlimited realm of beings and organism unborn and unknowable, thus taking it into virgin ethical territory. Jonas (1984/1979: 107) responds to the obvious difficulty of taking responsibility for the unknown and unknowable by arguing that due to human spontaneity, the unknown is always with us, it inescapably frames our decisions as an 'invisible co-object'. Non-knowledge and engagement with the unknown, he continues, are 'nothing but the moral complement to the ontological condition of our *temporality*'. Consequently, in our encounter with the unknown, it is the spontaneity grounded in human freedom that we are charged to guard and preserve as one of our highest goods. Our moral duty, therefore, is to ensure the future of being and human spontaneity. Metaphysics rather than the physical world of products, I therefore want to suggest, is the truly human domain of moral knowledge practices. Metaphysics is thus the ground that needs to be regained from the dominance of materialist knowledge.

Today's techno-futures, we can conclude, provide a context for responsibility that is fundamentally new and nothing in the established ethical traditions provides us with the appropriate moral tools to adequately deal with that altered condition. In contemporary industrial (and industrialising) societies the foundations for responsibility have extended from an individual to a collective base, from the exclusively human realm to biotic earth communities and beyond, from social life to techno-spheres, and from social relations in the here-and-now to the time-space distantiated realm of uncertain and indeterminable impacts. These extensions and associated shifts in emphasis warrant change not just in the understanding of the subject matter of a contemporary sociology of the future but also the nature of the discipline on the one hand and the role of the sociologist on the other. From the position of hindsight we can therefore see that the sociologists of the future of the 1960s had been more successful in setting the challenge for their successors than providing viable and lasting solutions.

Reflections for the Future

An obligation towards the posterity of a technologically produced, long-term future emerges with the elevation of science to dominant knowledge and the capacity to

create futures that outlast and out-reach the life spans of their originators. The extension of ethics to the techno-sphere becomes pertinent once those long-term creations have the potential to threaten not only individual existences across space and time but also the continuity of all species, that is, life as we know it. In this paper I sought to show first how some of the base assumption that underpin scientific knowledge have become inappropriate for grasping time-space distantiated outcomes (present and future) of the widespread practical application of that knowledge, how the rigorous pursuit of the scientific logic undermines its knowledge base, and how the increase in mastery is accompanied by a decrease in control over outcomes. I have argued secondly, that the contemporary future in the making requires sociological understanding which takes us beyond the important study of human purpose, intention and vision as guide to action in the present to the im/material future in the making, the future in progress, the deeds under way. This shift in focus confronts us with the inadequacy of our materialist, present orientation for engaging with contexts of uncertainty, immanence and latency and for conceptualising and studying the im/material. Only when both our scientific and ethical codes are subjected to fundamental revision, I therefore suggested, was the ground appropriately prepared for a Sociology of the Future that is adequate to and appropriate for the contemporary condition.

This proposed renewal of the sociological tool kit has implications for the role of the sociologist. First, it makes the sociological enterprise irreducibly normative and the pursuit of ‘objective’ and ‘unbiased’ research on the future a misnomer, a contradiction in terms. Accepting this, however, is not enough. We need secondly to acknowledge that the long honoured tradition of social engineering is no longer viable in a globally connected and interdependent world of time-space distantiated impacts that inevitably transcend their creators’ intentions. In the contemporary social context of indeterminacy, the social science promise of an alternative future subject to human design is misplaced, the move from interpreter of the social condition to agent for change no longer unproblematic. What we can and should provide in the circumstances I have outlined in this paper is, first, an understanding of the complex interdependencies at work in contemporary socio-technical, socio-economic and socio-political processes, secondly, explication of implicit, taken-for-granted and naturalised beliefs and assumptions and, thirdly, identification of openings for change. The suggestion is that sociologists become aids to a better future without resorting to claims about control over outcomes. Non-linearity, complexity, time-space distantiation, globalised interdependencies and knowledge of processes (not just products) need to accompany conceptual renewal of the traditional present-oriented materialism on the one hand and a-temporal humanist morality on the other.

Sociologists are ‘future makers’ – that was the assertion and the vision, the methodological innovation and the conceptual challenge presented by the sociologists of the future of the 1960s. In this paper I have identified some areas where this challenge had been left unfinished and others where it had not yet begun to be addressed. The implicit assumptions that guided both the science and the ethics proved to be of particular importance if the vision was to be brought to fruition and the breadth of ideas were to be translated into sociological practice. To contemplate the innovative work and apply it to the contemporary condition requires a collective effort not just from across the social science perspectives but from the humanities, the arts, the natural sciences and the professional spheres of medicine and technology.

Each of the members of these spheres of knowledge is implicated in the socio-technical future in the making, each challenged to play their part in closing the gap between the relentless production of techno-futures, the knowledge of their immanence and impacts and the responsibility for potential time-space distanced outcomes. Future makers need to unite to engage with socio-technical creations, identify for society openings for change and construct alternatives to facilitate a more just order for posterity.

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ⁱ For historical work that traces this development see Le Goff 1980, for sociological work see Adam 2004b, especially chapter 6.

ⁱⁱ A notable example of this would be Peter Winch's influential (1958) *The Idea of a Social Science*.

ⁱⁱⁱ Examples of UK work would be Bell 1974, Clarke 1964, Cole et al. 1973, Dumont 1974, Freeman & Jahoda 1978 and Young ed. 1968. See also a list of relevant committees set up to shape the future across the social domains, listed in Young ed. 1968 pp.35-6.

^{iv} Alwin Gouldner's *The Coming Crisis of Western Sociology* is the most pertinent example of work, which resonated with a large number of American and European sociologists who sought a different role for their discipline and actively worked towards a redefinition.

^v The book has been written at a time when human beings were still referred to as men, although it contains a footnote explaining that, of course, 'man' refers to the members of both sexes.

^{vi} The term is not explained so I take it to be used not in the strictly philosophical sense but in the more common-sense way of meaning visionary, beyond the present and not grounded in the empirical world of sense data and experience.

^{vii} For further details about Mead's *Philosophy of the Present*, see Adam 1995, 1998 and 2004a, Eames 1973, Flaherty and Fine 2001, and Joas 1985.

^{viii} A term introduced by Anthony Giddens in the late 1970s to encapsulate processes and associated impacts that are dispersed across time and space.

^{ix} This assertion about causality as prime means to explain temporal relations in no way negates ways of foreseeing the future that are more genuinely future-based in their approach such as back-casting, or the Foresight and Delphi methods, all of which are designed to overcome the problem of prediction in contexts of uncertainty.

^x The social science literature on this phenomenon is vast. Adam 1998 and 2000; Baumann 1998; Beck 1992/1986 and 1996 can serve as exemplars here.

^{xi} See also Adam 1998 for a socio-environmental perspective on the subject.